IN THE SPECIFICATION:

Please amend the specification as show below:

Replace the second paragraph, between lines 9 and 23, on page 2 with the following:

This laser scribing method has another shortcoming. When portions of a transparent conductive film formed over a soda-lime glass substrate with an ion blocking film therebetween is removed in order to produce electrode patterns thereon, the ion blocking film and the glass substrate are partially eliminated together, and therefore the surface of the glass substrate is exposed. Eventually, in case of liquid crystal device manufacture, the liquid crystal material contained in the device is contaminated by sodium ions introduced from the glass substrate. Furthermore, the scribing makes the upper surface thereof uneven as well as residue remaining on the edges of the removal portions, the residue is piled as high as 0.5 to 1 micron. The unevenness is undesirable not only in regard to the application to liquid crystal devices but also to the manufacture of general electric devices including laminating process the uneven surface [[might]] may be the cause of electrical shorting between different levels of the laminate and disconnection of the electrical patterns superimposed thereon.

Replace the paragraph bridging page 3 and page 4 with the following:

The heat transmission is an obstacle to the formation of clear edges of grooves. While laser irradiated portions are heated to its boiling point, the adjacent portions are necessarily heated, reflow and form swollen edges adjacent to the grooves. In order to minimize the formation of the swollen portions which cause disconnection of an overlying film coated thereon, it is necessary to elevate the temperature of the portions to be removed to the boiling point in advance of substantially heating the adjacent portions of the ITO film. This is accomplished by making use of a laser beam having a short wavelength and a short pulse width. The wavelength is selected to be not longer than 400 mm (3.leV). The pulse length is not longer than 50 nanseconds. YAG lasers, which have been broadly used in the field, can not emit such a power concentrated laser pulse. The applicant found that [[eximer]] <u>excimer</u> lasers could be used for this purpose. In this regards, the damage of the ion blocking film during laser scribing largely depends on thermal conductivity thereof. As the thermal

conductivity is low, the elevation speed of the ion blocking film becomes low and suffers little influence of heat from the overlying ITO film.

Replace the second and third paragraphs, between lines 4 and 27, on page 4 with the following:

The melting points of the ion blocking film and the ITO film are very important. If the ion blocking film is easily molten, there is a chance that openings [[is]] are formed in the blocking film so that the glass surface is exposed through the grooves. In this regards, the choice of ITO and non-doped SiO_2 is desirable since the melting points of the former and the latter are 890°C and 1700°C respectively. The melting point of the SiO_2 film is in turn substantially higher than that_of the glass substrate. The energy gaps of them are also suitable for this purpose. SiO has an energy gap of 7 to 8 eV and therefore absorbs little portion of the [[eximer]] excimer laser beam of a short wavelength, while ITO has an energy gap of 3 eV.

The method in which only the ITO film is selectively removed by the laser scribing is advantageous having regards to the desirability of smooth and level surface of patterns. Even in accordance with the present invention, residue remains after removal of the ITO film. The residue, however, can be easily eliminated by HC1 etch since it is composed of InO_x and SnO_x of porous structure. Unlike this, in accordance with prior art methods utilizing YAG lasers in which the SiO_2 film is eventually partially removed, the residue is formed somewhat integrally with the remaining portions of the ITO and composed of an indium or tin alloy which is mixed with silicon contained in the underlying ion blocking film. The residue can not be eliminated by [[HCI]] HCl etch and requires HF etch. Even if HF etch is used, the residue can not be selectively removed independent of the remaining portion of ITO film, which tends to be partially removed together with the overlying ITO film by HF etch.

Replace the paragraph, which bridges pages 7 and 8, with the following:

The laser beam is repeatedly projected on the substrate 1 in the form of pulses while the substrate is slided respective to the laser beam. The pulse duration is 20 [[namo]] nano seconds and the frequency is 1-100 Hz, for example 10 Hz. Then grooves 35, 36, 37, ... are

formed as illustrated in Fig. 3(A) and 3(B). The distance between adjacent ones of the groove is 15 mm. Residue is left around and inside of the grooves. The residue is selectively removed by an acid, for example, a hydrochloric or hydrofluoric acid (diluted by water at 1/10) or a fluoride solution mixture such as an acidic ammonia fluoride, followed by ultrasonic cleaning (29 KHz) with acetone and pure water.

Replace the paragraph bridging pages 8 and 9 with the following:

An ITO film 105 is deposited by sputtering to a thickness of 0.1 to 2 microns. As shown in Fig. 1 a train of laser pulses are emitted from an [[eximer]] <u>excimer</u> laser and projected on the ITO film 105, while the substrate 101 is slided with the holder 10 in the lateral direction of Fig. 6(B). The pulse projection and the sliding of the substrate 101 are synchronously performed in order that the projections occur at intervals of 390 microns respective to the irradiated ITO film 103. The surface of the ITO film is scanned three times. Accordingly, the power of the laser pulse is selected to eliminate the ITO film throughout the thickness by three times projection without causing substantial damage to the underlying blocking film 103. Although grooves can be formed only by a single projection of the laser pulse, the use of a plurality of projections is preferred in order to precisely control the effect of the laser scribing and improved the configuration of the pattern. Finally, residue 107 by the sides of the grooves is eliminated by diluted HF etch as illustrated in Fig. 4(D).

Replace the paragraph bridging pages 10-11 with the following:

As shown in Fig. 7(A), a non-single crystalline semiconductor film 52 such as an amorphous ~~silicone~~ <u>silicon</u> or solid phase crystallized silicon is formed by plasma CVD on a soda-lime glass substrate 1 having a silicon oxide or silicon nitride blocking layer 51 having a thickness of 1000-4000Å, e.g, 2000Å on its surface. The non-single crystalline semiconductor layer 52 is substantially intrinsic but a suitable dopant species such as boron or arsenic may be added therein. Optionally, hydrogen or a halogen such as fluorine may be added to the semiconductor layer 52 as a dangling bond neutralizer. Also, the semiconductor layer 52 is 200-1500Å thick, for example, 500Å. Further, the semiconductor layer is covered

by an insulating layer 59 made of silicon oxide or silicon nitride and having a thickness of ~~200-1500Å~~ 200-1500Å.

Replace the third paragraph, between lines 12 and 27, on page 11 as follows:

Subsequently, a laser crystallization in accordance with the present invention is performed to the patterned semiconductor layer. As explained in the first embodiment of the present invention the laser beam finally emitted from the laser system shown in Fig. 1 has a line shape. The width of the line shaped laser beam corresponds to the width of the semiconductor island 58. Alternately, the width of the line shaped laser beam may be slightly larger than the width of the semiconductor island. The energy density of the laser beam is 0.3-0.5 J/cm^2. The wavelength and the pulse width of the laser beam is, respectively, 248.6 nm or 308 nm and 15 nanoseconds, for example. Thus, a plurality of semiconductor islands arranged in one column line is exposed to the laser beam at one time as shown in Fig. 7(B). The other semiconductor islands arranged in other columns are treated in the same manner by repeating the emission of the laser beam with the substrate moved in one direction as indicated by the arrow 60 in ~~Fig. 7~~ Fig. 8. Actually, either one of the laser optical system or substrate may be moved.

Replace the third paragraph, between lines 5 and 7, as follows:

Although the conductive film is made of a transparent conductive material such as ITO, [[SiO_2]] SnO_2 or ZnO film, a thin film of a metal such as chromium or molybdenum can be used in the same manner.